

## HEALTH ISSUES | Save the Girls. Make the Bra a No-Phone Zone

April 15, 2015 | Filed under: [Technology](#) | Posted by: [GG Contributor](#)

By Dr. Devra Lee Davis –

***A large number of young women carry their cellphones in the bra unaware that they are exposing themselves directly to microwave radiation. That is not a good idea. In fact, the phones come with specific warnings from manufacturers not to do so.***



Dr. John West and his colleagues at Breast Care in Southern California have been working with Dr. Lisa Bailey, former president of the American Cancer Society California and one of the nation's top breast surgeons. Together with Dr. Bailey and Dr. West's team, we have accumulated seven cases of young women with very unusual breast cancers,

all of whom have no family history and no genetic risk factors for the disease.

Normally, breast cancer occurs in the upper outer quadrant of the breast, toward the armpit. These unusual cases have breast tumours that are barely under the skin and have multiple tumors at the centre of the chest right under the outline of where these women kept their cellphones. Two of these cases are only 21 years old. Breast cancer rarely occurs in 21 year olds. These women carried their cellphones in their bras from the time they were 13 years old for hours per day. Multiple primary breast cancer is not common, either. No more than 10 percent of all breast cancers present as multiple primary.

There has not been serious experimental or public health research on the relationship between cellphones and breast cancer in the United States. However, Turkey scientific publications report that breast cancer cell growth quadrupled when exposed them to cellphone radiation. In reviewing the 18-year-old approach to cellphone testing, the US Government Accounting Office noted that phones are not tested as used and recommended more realistic testing scenarios be developed. Modelling studies indicate that phones kept close to the body in the shirt or pants pocket can produce two to six times more microwave radiation than recommended.

The warnings on an iPhone can be found under "Settings" by selecting "General>About>Legal>RF Exposure". It advises you to use a headset or a speakerphone during a call, to keep the phone at least 10 mm away from the body at all times, and that cellphone cases (or holders) with metal parts may change the phone's compliance with RF exposure guidelines in a manner that has not been tested or certified. Unlike most other contents of the iPhone, the text of these RF Exposure warnings cannot be enlarged or copied. Most consumers are completely unaware of the existence of those warnings. Some women tuck cellphones

into their bras or their headscarves, and men often carry cellphones in their pants pockets. In addition, some children and youth put cellphones or mobile devices in their chest pockets. BlackBerry and other smartphones have similar warnings, such as, “Don’t keep the phone in the pocket” and “Keep the phone at least 2.54 cm away from the abdomen of pregnant women or teenagers.”

Men who want to father healthy children have to be aware: if you take sperm from healthy men and put them in two test tubes, where one test tube gets exposed to cellphone radiation and the other does not, the sperm in the test tube exposed to cellphone radiation die three times faster and have three times more damage in their DNA than the unexposed sperm. There is a growing consensus in the medical community that cellphone radiation is a health problem. According to Professor Stanton Glantz of the University of California, a well-known expert in biostatistics, cellphones clearly do damage sperm, but should not be considered a reliable form of birth control.



*Dr. Devra Davis PhD MPH holding a plastic baby teething rattle case for iPhone. Photo courtesy of Maloka Science Museum Bogotá, Colombia*

I was trained as a Post-Doctoral Fellow at Johns Hopkins University in Cancer Epidemiology and I worked with the US National Academy of Sciences for 10 years directing environmental studies. As director of the Center for Environmental Oncology at the University of Pittsburgh cancer institute, I owned three cellphones and insisted that all the senior staff whom I was working with had to carry a BlackBerry on their bodies so I could reach them when I needed them.

When my first grandchild was at nine months of age, he was able to take a cellphone, turn it on, find a game, and play it. At first I was very proud of him. Inspired by my grandson’s skills with cellphones, I began to look into what we knew about cellphones.

What I found shocked me.

I naively thought that all consumer goods had been adequately tested for safety. However, I discovered that the so-called “safety” of cellphones was based on an extremely outdated paradigm that contradicted cutting edge science. I further realized that the mobile industry used their financial advantage to “war game” scientists whose research revealed that cellphone radiation was associated with increased risk to human health. While reviewing cellphones, I noted a serious problem looming—that there was no more unexposed control group, as most people in the world were using cellphones. I saw from my own research on environmental studies and my previous work on the war of cancer how long it took for us to take action against tobacco, asbestos, and other toxic substances. It took us far too long to reduce people’s cigarette smoking. Although we have finally seen a decline in tobacco death, numerous lives have been sacrificed over decades while the problem was denied and the solution was delayed.

The public needs to understand that a cellphone is a two-way microwave radio. In order for it to receive information, it must send signals to the tower for the tower to send signals back to it. Whenever you are moving (e.g. in cars or on bikes) while you are on your phone, the phone operates at full power to maintain connection with one cell tower after another. That means continuous, maximum microwave radiation. On top of that, you have constant microwave radiation plumes generated by Wi-Fi and Bluetooth two-way transmissions as well as notifications and updates of numerous smartphone apps. The mobile industry euphemizes this radiation as “radiofrequency energy,” because marketing cellphones as two-way microwave radios used next to the brain would not make them very popular.

To use a cellphone smartly, turn it on only when you need to use it. Otherwise, keep it on airplane mode because on airplane mode it cannot send microwave radiation to a cell tower or into you. In addition, distance is your friend. Keep your cellphone away from your body, use a wired headset or speakerphone. Keep the cellphone out of your pockets and your bra. Make the bra a no-phone zone.

Share this message with #savethegirls. Visit [ehtrust.org](http://ehtrust.org) and [showthefineprint.com](http://showthefineprint.com) for more information and for free cards to be copied and shared.

***Dr. Devra Lee Davis, M.P.H., Ph.D, is recognized internationally for her work on environmental health and disease prevention. A presidential appointee who received bi-partisan Senate confirmation, Dr. Davis was the founding director of the world's first Center for Environmental Oncology and currently serves as president of Environmental Health Trust. She lectures at universities around the world and was the recent winner of the Carnegie Science Medal in 2010 and the Lifetime Achievement Award from Green America in 2012. Her 2007 book, The Secret History of the War on Cancer, is being used at major schools of public health, including Harvard University. Her most recent book, Disconnect, was awarded the Silver Medal from Nautilus Books for Courageous Reporting and selected by TIME magazine and Amazon editors as a top pick. Dr. Davis' research has appeared in major scientific journals and has been featured on CNN, CSPAN, CBC, BBC, and public radio.***

### ***Related***

## **SCIENCE | HEALTH ISSUES | Cellphones and Health**

By Dr. Joel Moskowitz -- In the last issue we explored the potential hazards of electromagnetic radiation from iPad use. We learned about warnings from the European parliaments and doctors'...

### **Distribution**

Located in the Cariboo-Chilcotin region of British Columbia. In print: Over 10,000 readers in the Cariboo-Chilcotin including Williams Lake, 100 Mile House, Quesnel, Prince George, Bella Coola, Horsefly, Clinton and communities in between. For a full list of our distribution locations, please visit the inside back page of TheGreenGazette in print or online.

- Designed by KS